A Case Study in ePortfolio Implementation: A Department-Wide Perspective

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This case study documents the trials and tribulations over a 3-year span of one academic department in implementing the ePortfolio as a high-impact practice to its undergraduate students. Failures and successes will be introduced with the resulting lessons learned applied to our current efforts. Pivotal instances that allowed the project partners to gain clarity about the design and implementation of an ePortfolio will be expressed to better understand our journey. The root of our collaborative efforts was based on the product versus process conversation around ePortfolios. Once our mindset shifted, we were able to embrace a more student-centered process ePortfolio that is threaded throughout our curriculum and not sporadically addressed as an add-on assignment.

Electronic portfolios (ePortfolios) are rightfully positioned as a high-impact practice in higher education (Watson, Kuh, Rhodes, Penny Light, & Chen, 2016). In fact, over 50% of all colleges and universities in the United States employ some form of an ePortfolio (Jenson & Treuer, 2014). As such, there is a long list of established benefits, to both faculty and students, when ePortfolios are embedded in a course or program. These assertions typically include: (a) an efficient way to organize artifacts, (b) a tool to stimulate reflection, (c) an efficacious way to measure learning, (d) a way to connect curricular and co-curricular experiences, or (e) a timely medium to provide feedback, just to name a few (Egan, Cooper-Ioelu, Spence, & Peterson, 2018; Hager, 2013; Light, Chen, & Ittleson, 2012).

A review of the literature indicates that ePortfolios are often cited as tools of either documentation, reflection, or assessment of curricular and co-curricular learning. For curricular learning, the ePortfolio is linked to a particular academic program, course, or assignment, and in some instances a combination thereof (Buente et al., 2015; Cheng, 2008; Emmett, Harper, & Hauville, 2005; Light et al., 2012; O'Keeffe & Donnelly, 2013). In other ways, ePortfolios are used by co-curricular entities on campus—such as student affairs—to highlight and document informal learning and have a decidedly career readiness focus (Chen & Light, 2010; Light et al., 2012).

As it relates to the ePortfolio for curricular learning, Yancey (2019) underscored that there is a continuum of integration into the teaching and learning system. In particular, on one end, if the ePortfolio simply represents student learning and does not itself promote learning, it acts more like a "wrapper" or a show-case. Conversely, on the opposite end, if the ePortfolio development itself stimulated student learning, in addition to the content and experiences of the course, then it serves more as a "curriculum." Regardless, where the ePortfolio lands on this continuum is found squarely within the reach of either a faculty member or the academic program in which it is housed. Consequently, the way the ePortfolio is implemented in the overall curriculum, a course, or within a particular assignment will impact its landing spot on the continuum.

Additionally, the way in which ePortfolios are understood and used as a high-impact practice varies greatly (Barrett, 2005; Jenson & Treuer, 2014). Along with not agreeing on a universal definition, it is also not clear how intentionally adopters of the ePortfolio take into account the end-user perspective, the student. This is compounded by the fact that ePortfolios are, obviously, technology-based and driven. Therefore, given the ever-present nature of technology in each aspect of student lives, one could argue the best informer of ePortfolio usage and the stakeholder best positioned to inform educators about ePortfolio best practices should be the student. Parkes, Dredger, and Hicks (2013) highlighted this quite clearly when they shifted the ePortfolio paradigm from the classic compilation of artifacts to one where students were empowered to select artifacts to include and then after this choice, and the students were asked to express why they chose what they did and how it fits into their current and future "selves." On the contrary, if the student voice and choice is ignored, one could argue that with so many technology options for information, education, and entertainment, the ePortfolio can easily get lost in the mosaic of student daily living and, thus, students will not embrace the ePortfolio.

Taken together, the lack of a common definition and the scant formal attention paid to the student perspective, there are, unsurprisingly, varying degrees of success in implementing the ePortfolio (Endacott et al., 2005). This lack of consensus and contextual clarity heavily affects the extent to which educators invest time in learning about ePortfolios. As a result, faculty could be hesitant or even impervious to installing an ePortfolio into a course they teach or a program in which they are faculty. As important, the sustainability of ePortfolios through the necessarily rigorous scholarship of common practices becomes questionable when there are no common practices to study.

In a simplistic—albeit powerful—sense, much of the current dialogue on ePortfolios centers on whether

this educational tool is best used to aid the *process* of learning versus being used as a tool to document the *product* of learning. This was echoed by Matthews-DeNatale (2019), who suggested the most important next step to move the ePortfolio along the continuum toward the goal of curriculum is how to reconceptualize it from a noun (product) to a verb (process). This paper explores one department's journey in doing just that. This case-study will reveal the development and implementation of a department-wide ePortfolio project, going from product (noun) to process (verb) while factoring in both student and faculty perspectives.

Context

The faculty colleagues on this project work at a doctoral, high research activity institution prominently known for being community-engaged and is located in a large metropolitan area in the Midwest. Our department, the Department of Kinesiology, is one of eight departments housed in the fifth largest school on campus. Furthermore, the department has an undergraduate focus and embeds eight of the generally accepted high-impact practices throughout its curriculum (i.e., first-year seminars and experiences, learning communities, collaborative assignments and projects, undergraduate research, service-learning/community-based learning, internships, capstone courses/projects, and ePortfolios). In fact, our department's tag line is that each student will be engaged *early and often* in a high-impact practice.

While the campus has been active within the ePortfolio space for some time, the department has taken a measured approach in how it uses the ePortfolio. To some extent, both our campus and department emulate the national narrative on ePortfolios. We, both, are varied and slightly unsure about how we define, understand, and implement the ePortfolio. In sum, we are typical.

About three years ago, we came together and discussed the idea of implementing an ePortfolio as a culminating assignment for our majors. This idea was birthed from the work we had been doing previously in assessing our student learning outcomes (SLOs) annually and the campus-level recommendation to use ePortfolios in first-year seminar courses (ePDP or electronic personal development plans). We believed that developing an ePortfolio for student use when applying for internships or a job was a natural extension of our assessment of the teaching and learning process. This project would touch undergraduate majors within the three plans of study in our department (i.e., exercise science, fitness management and personal training, physical education teacher education) and, again, serve as a concluding piece to the students' undergraduate experience. We had visions of our graduates showing their ePortfolios to potential employers as part of the interview process. This was truly an ePortfolio as product mindset.

Strategy and Outcomes

When starting our dialogue on this pilot project, we focused on the campus-endorsed ePortfolio platform (iTaskstream, an externally vended product at the time) as the tool for collection and dissemination. We then built our project around that portal, using the features and prompts that were evident and relatively intuitive for assignments so that students would have an easy time making connections to the assignments and then the ePortfolio platform. Moreover, we had considered ways that the ePortfolio could be linked to social media sites with an employment focus such as LinkedIn. Our intentions were to benefit the student and make this an attractive feature of their learning. As a result, the primary objectives that drove our planning were the following:

- Learn the Taskstream ePortfolio platform,
- develop an ePortfolio framework to enhance career development/readiness for all Kinesiology students,
- create and implement ePortfolio courses and assignments for each Kinesiology major,
- develop assessments tools such as rubrics to evaluate the various ePortfolio assignments, and
- pilot ePortfolio assignments in select courses.

With these outcomes in mind, we developed an action, implementation, and evaluation plan. This plan was mapped out over the next academic year, with each of us filling roles that contributed to the outcomes. Within the first semester of implementation, through the lack of quality in much of their work, it became quickly apparent that the students were not as enthusiastic about this new dimension of their learning as we were. In addition, from the student and faculty perspectives, the vended ePortfolio platform was stilted, cumbersome, and not easy to navigate. In addition, we learned that graduates would have to pay to continue having access to their ePortfolios in Taskstream after they left our campus. To make matters worse, soon after the semester began, the campus announced it was severing ties with the ePortfolio vendor.

In retrospect, it did appear the ePortfolio was an add-on element to each course in which it was introduced and not woven into the fabric of the course. It seemed like "one more thing to do" in the course even though we were using existing assignments as artifacts. This was partly due to a lack of the true benefits for students of utilizing ePortfolios and lack of well-crafted reflection prompts for students. Without a doubt, the proper context for student buy-in was missing. Admittedly, we set our students up to fail, which they fully embraced. As a result, we pumped the brakes and hit pause on this pilot project.

We then took then next academic year to learn why we failed. We dedicated ourselves to various professional development opportunities on and off campus to ensure we had a more mature understanding of the ePortfolio. From attending conferences, speaking with campus experts, being involved with an ePortfolio pilot in the learning community program on campus, and the reading of many articles, we came to conclude that we did not, in fact, have a solid grasp on the national and international dialogue on ePortfolios. Therefore, our cursory knowledge prevented a successful launch.

When we regrouped to determine our next steps, there was certainly a preliminary conversation about whether or not we should even try this again. Yet, we were committed as we knew that, with small changes, our program-level implementation would truly reflect a high-impact practice. In fact, we could each point to one profound example where we gained clarity during our year hiatus. First, there was an experience from an international conference where the product versus process dialogue was in full view. This was transformational to us. Early on, we thought the only and best option was for the ePortfolio to be used as an object to aid in the job search, a product, if you will. We had not conceived the notion that the process or the journey was as important as the destination. Moreover, we now understood we should allow students both a voice and choice in this process for a chance of buy-in. This voice and choice began with their ability to decide on the technology they would adopt to tell their story via an ePortfolio.

One team member was involved in an ePortfolio project through the university's learning community program. As a part of that involvement, she reviewed ePortfolios from a variety of learning communities across campus. As part of the review, the Integrative and Applied Learning VALUE (Valid Assessment of Learning in Undergraduate Education) rubric from AAC&U (2009) was used to assess the level of integration in the ePortfolios.

This experience exposed her, and ultimately her team, to a deeper understanding of integrative learning. The process of reviewing ePortfolios from across campus was enlightening in that it exposed her to the range in quality of ePortfolios from the campus. This highlighted our strengths and weaknesses and gave us a local gauge by which to judge the quality of our own ePortfolio project. One of the weakest areas of our ePortfolio at the first-year level was the depth of integrative reflection. While this might be due in part to the students' academic level, we realized that it was mostly due to a lack of quality, well-written reflection prompts. At the first-year level especially, we need to explicitly guide students to integrate their learning and experiences from various courses. Our thought moving forward was to be sure we allowed students to not only decide on the artifact of learning or experience to highlight but also the freedom to decide which technology they wanted to use to best share their academic journey.

Now that we have established that the platform used is actually irrelevant and that the process (documentation and reflection) is as important as the product (camera-ready tool), we can meet the students where they are in their academic career. Our two overarching goals now are to have students (a) articulate what it means to be a young professional and (b) engage in self-reflection for personal growth over their lifetime. Therefore, our project outcomes are to

- implement reflective ePortfolio assignments for all majors in the Department of Kinesiology,
- provide a central space for students to highlight and reflect on course assignments/projects and extracurricular activities,
- teach students the importance of self-reflection by emphasizing the process of becoming a young professional, and
- instill important skills for ongoing professional growth and self-reflection that students will utilize as reflective practitioners in their future careers.

Implementation Challenges

For instructors with little or no experience with ePortfolios, the challenge of implementation within a course can seem daunting. Instructors may be deterred from adopting ePortfolios because they do not understand the positive impact of ePortfolios, the logistics involved, and have a lack of understanding about the available assessment options. Although strongly committed, some of these concerns were present within our team of faculty as well. After analyzing and reflecting on two semesters of implementation of an ePortfolio in a large ($N = {>}100$ students) undergraduate introduction course, the following insight was harvested from the instructor.

Initial implementation missteps included:

- Assuming students are proficient with the technical aspect of platforms used to create the ePortfolio,
- not having several diverse and detailed examples for students to use as a resource,
- not dedicating enough time in class for students to develop the ePortfolio,
- not providing a clear conduit for student feedback prior to completion, and
- not providing enough feedback for the students during the process.

Through student feedback and analysis of objective outcomes, the following recommendations are suggested:

- Be clear in translating what an ePortfolio is and how it may benefit the student.
- Give students several platforms from which to choose.
- Define terms such as artifact, tab, navigation, and reflection, and provide examples of each.
- Utilize prompts to promote reflection and help bridge the connection between assignments and projects, curricular and life experiences, and learning (see Appendix A for sample prompts).
- Provide detailed and diverse examples along with specific feedback on how the instructor is assessing the ePortfolio (see Appendix B for a sample rubric).
- Ask for student feedback and perspectives early in the process.
- Focus on helping students understand what it means to be a reflective practitioner and how it may enrich their academic and professional journeys.

From this instructor's perspective, several resources were paramount in helping with implementation. For example, campus and school assistance with professional development funding made it possible to attend conferences focused on ePortfolios and assessment. This provided insight and limited the concerns over the previously mentioned barriers. Campus resources with expertise in ePortfolios and high-impact practices were supportive in assisting with feedback and guidance throughout the process. The team of faculty colleagues involved with implementation were integral in providing assistance with logistics and technical support. Finally, the examples and feedback shared by students who have both struggled and prospered from the process of creating and developing their ePortfolios were an invaluable asset in the implementation.

Recommended Steps Toward Maturity

Throughout the next year, our team will continue implementing our department-wide ePortfolio for all Kinesiology majors. Specifically, students will begin their ePortfolio during the first semester of freshman year and add key assignments and reflections at each level, culminating with a capstone experience during the senior year. This reflective ePortfolio will serve as a central location for our students to highlight meaningful and impactful learning experiences, while exploring the process of personal and professional development via guided- and self-reflection. Students will use the ePortfolio as a visual representation of their personal journey to professionalism. The ultimate goal of this project is to offer a venue for our students to illustrate various experiences inside and outside of the curriculum that have shaped them into the professionals they have become by the end of their studies.

Our team is committed to ongoing local and national/international professional development. On our campus, the ePortfolio leadership has moved from the Office of Academic Affairs to our newly formed Institute for Engaged Learning (IEL) to be housed with other high-impact practice programs. This strategic move will allow for more faculty and student input into ePortfolio implementation campus-wide. At the campus level, one team member will participate in a course design institute co-sponsored by our Center for Teaching and Learning and the IEL with the purpose of creating well-written, directed reflection prompts for our first-year level ePortfolio project. These improved writing prompts early in the students' ePortfolio experience will lead to deeper, more meaningful, and integrative reflections from the beginning of their ePortfolio journey. Hopefully, this will make the entire program-wide ePortfolio process richer and more meaningful for our students.

Conclusion

Summing up, our three-year journey has taught us important lessons about successful implementation of a department-wide ePortfolio plan. While well intended, we were very premature in our implementation. Undoubtedly, we focused too heavily on the ePortfolio as a product and not enough on the process. Furthermore, we ascribed to the notion that we knew best the type of technology our students would want their professional journey and narrative to be located on, overlooking the student voice and choice. Taken together, these two views proved to be serious blows to the fruitful launching of our ePortfolio project. Currently, after a year-long and high-fidelity approach to professional development, we are optimistic in our efforts to stand up our ePortfolio project. Our primary goals, now, are aligned with more of the generally accepted outcomes of (a) facilitating our students into reflective practitioners and (b) promoting lifelong learning.

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Appendix A
Sample Reflection Prompts

1. Personal Summary: This should be a detailed description of who you are. Reflect on two to three life experiences that have shaped you into the person you are today. Include things such as mentors and/or important milestones/markers in your life. *(100-level first-year seminar course)*
2. Major and Career Goals: Describe your major and any minors or certificates, and reflect on why you chose your major. Explain your career goals and reflect on why they are meaningful to you. *(200-level intro to exercise science course)*
3. Teaching Philosophy: Give a detailed summary of your individual teaching philosophy as it relates to your values and beliefs. This should highlight your specific methods of teaching and should include a specific example of how you apply your philosophy in the classroom. Other areas to consider include your interactions with students, how you assess learning, and continued professional growth. Be sure to cite references if applicable. *(100-level history and principles of physical education course)*
4. My Involvement and Impact: This should be a meta-reflection of your overall experience in college. Think back on your meaningful experiences; first, describe the experience and then reflect on how it helped shape you into the professional you are today. *(400-level capstone course)*

Appendix B
Sample Rubric

100-Level First-Year Seminar Course

Criteria	Needs Work (0-5 points)	Developing (6-8 points)	Excellent (9-10 points)
ePortfolio Design and Navigation Navigation menu should contain the following tabs: (1) *Home/About Me,* *(2) Significant Learning Experiences*	☐ No design ☐ Missing tabs ☐ Not easily navigated ☐ Broken links ☐ Pages look messy and cluttered ☐ Not all content is public	☐ Design and& navigation are good, but lack creativity ☐ Pages are bland and/or inconsistent in design	☐ Student has used creativity with the ePortfolio design ☐ Easily navigated ☐ Pages have relevant photo/digital elements (i.e., artifacts) in relation to written content
Criteria	**Needs Work (0-11 points)**	**Developing (12-17 points)**	**Excellent (18-20 points)**
Home/About Me Offers a "welcome" to audiences. Includes an introduction by offering some highlights of the student's background and interests, and other information of their choosing.	☐ No/not enough content ☐ Insufficient introduction to the student's background, interests, etc. ☐ No photos/graphical elements	☐ Sufficient content ☐ Sufficient introduction to the student's background, interests, etc. ☐ Appropriate photos/digital elements (i.e., artifacts)	☐ Engaging content ☐ Well developed introduction to the student's background, interests, etc. ☐ Engaging photos/graphical elements
Criteria	**Needs Work (0-11 points)**	**Developing (12-17 points)**	**Excellent (18-20 points)**
Significant Learning Experiences Showcases student experiences supported by artifacts and reflections. Experiences should include: *(1) Monumental Marathon Service Learning, (2) Insta-Tweets, and (3) at least one additional experience.*	☐ Missing summary for one or more experiences ☐ Missing artifacts for one or more experiences ☐ Missing reflection for one or more experiences	☐ Experiences summaries and artifacts are present but not fully showcased and integrated ☐ Reflections are present but not in-depth	☐ Summaries are concise and well written ☐ Experiences are showcased effectively using a variety of artifacts ☐ Reflection is apparent and in-depth